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SYNTHESIS OF A NEW CLASS OF THIAZOLYL MORPHOLINES / THIOMORPHOLINES AND EVALUATION AS ANTIMICROBIALS

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Abstract. Thiazoles and their derivatives exhibit antibacterial, antifungal and anti-inflammatoryactivities. The Hantzsch reaction of α-halocarbonyl compounds with thioureas or thioamides is the most commonly used method for the synthesis of thiazoles. They are known to have antimicrobial, anticancer, anti-inflammatory and anti-HIV properties. Morpholine is a heterocyclic organic compound, many of morpholine derivatives have very good biological activity in different therapeutic area such as antibacterial, antiviral, anticancer, antimicrobial, antidiabetic, anti-inflammatory, antimalarial, antifungal etc. Moreover, thiomorpholines analogs are associated with a variety of pharmacological activities including anti mycobacterial, antibacterial, analgesic and anti-inflammatory. In continuation of our studies and also to establish structure-activity relationship of the compounds, the present work synthesis and antimicrobial activity of sulfonyl methyl linked mono and bis-heterocycles having different heterocyclic moieties has been taken up.